Slide 1 – Local Employment Dynamics: All About Jobs
A partnership between the U.S. Census Bureau and 35 states produces new information that describes the dynamic interaction between workers and employers. This local labor market information will benefit America's businesses and workers in communities across the country.

The products of this partnership create a powerful array of tools to help you answers questions about local jobs, top industries, and the workforce, and to map the relationship between those workers and those jobs.

Slide 2 – Overview
This presentation explains why this new information about jobs and workers is so important to economic developers, workforce investment boards and planners, just to name a few. In addition to a brief explanation about how the Local Employment Dynamics (LED) program works and how many states are involved, you will learn about the four tools created for your use in analyzing your local labor market.

Slide 3 – Traditional Demographic and Economic Data
The Local Employment Dynamics program is different from traditional demographic and economic data. As shown here, those data captured information about workers or businesses or about households but the interaction between the worker and the business was rarely demonstrated.

Slide 4 – Local Employment Dynamics: The Concept
With LED, those traditional building blocks have been connected to illustrate the dynamic relationship between job and worker, economy and workforce.

Slide 5 – Local Employment Dynamics
LED produces measures about employment and workers that are **local** – available for states, counties, Metropolitan Statistical Areas, and workforce investment areas (WIAs).
The **employment** information is available by age and gender, by industry (offering SIC or NAICS 2- and 3- digit detail) and includes information on earnings.
The data sets are **dynamic**, showing job gains and losses, new hires and separations over time.

Slide 6 – What is Local Employment Dynamics?
What is the Local Employment Dynamics program? A partnership between the U.S. Census Bureau and nearly three-quarters of the states. The LED information is possible because of an innovative system that merges data already collected from various sources. The state Labor Market Information (LMI) agencies supply key data from unemployment wage records and from businesses each quarter. The Census Bureau merges the data from the LMIs with current demographic information to produce the data found on the LED web site. By combining data from different administrative sources, censuses and surveys, the Census Bureau produces local employment information that was not available before.

Slide 7 – Confidentiality Protection
As with all Census Bureau data, CONFIDENTIALITY IS PROTECTED BY LAW. Every person with access to data is sworn by law to protect confidentiality. It is against the law

to publish or disclose any data that identifies an individual or company: no names, no addresses, no Social Security numbers, no telephone numbers.

A Federal law, Title 13 of the U.S. Code, provides strong confidentiality protections for all individual information collected by the Census Bureau. Violating this law is a Federal crime with serious penalties, including a prison sentence of up to five years and a $250,000 fine. Under Title 13, the Census Bureau collects data solely to produce statistics.

To prevent the inadvertent disclosure of confidential information, we use a "Rule of Three" – any cell with fewer than 3 businesses or 3 employees is suppressed. Every product released is subject to an independent disclosure review. In other words, we've built a firewall within a firewall within a firewall.

Slide 8 – Status of LED
Seventy percent (35 out of 51) of the states are partners in the Local Employment Dynamics program and more are joining. Once a state signs a Memorandum of Agreement with the Census Bureau, they begin to supply the necessary data to the U.S. Census Bureau for processing. It generally takes about six months to produce data for the first time. One of LED's quartet of powerful online analytic tools, The Quarterly Workforce Indicators (QWI) currently features data for 22 states.

Slide 9 – LED Partner States
The solid color states shown here are in production now. That means they've signed an agreement and have started supplying quarterly data to the Census Bureau. Those shown in cross-hatching have signed agreements with the Census Bureau so recently that they have yet to begin providing the necessary data. Several of the remaining (light color) states are in discussion and are seeking to join the LED partnership.

Slide 10 – Who Uses LED Data? What Do They Need to Know?
For Workforce Investment Boards and training professionals, the LED toolset helps answer questions about where the jobs are, what workers are paid, and who needs what kind of training. For employers, the data might be used to show where the workers are located and how much they earn. Economic development agencies might use the indicators to determine what the high growth industries in their area are or where more businesses might be located. And transportation planners will find this to be great new resource to decide how to improve the ways workers get to and from their jobs.

Slide 11 – Revised and Enhanced Home Page: http://lehd.dsd.census.gov
In early December 2004, the re-designed and greatly enhanced LED web site was launched. LED is only one portion of an umbrella program called Longitudinal Employer-Household Dynamics. The LED component focuses on employment dynamics. In the future, similar products related to transportation, immigration or health care, for instance, may also be derived from this system of combining existing data sources to produce new and dynamic local information.

Key features on the home page include QuickLinks to quartet of very powerful analytic tools: QWI Online, On the Map, Local Workforce, Top Industries.

The center section provides the latest news about the LED program: new partners, information about training.

Q&A about LED are conveniently located prominently on the home page.

Navigation by tabs across the top of the page is complemented by the listing for each tab on the lower portion of the page.

A "factoid" from the LED data rotates in the lower right corner and links users to reports on Older Workers.

The LED site is searchable using Google, which confines its search to the LED pages only.

Slide 12 – Quarterly Workforce Indicators Available On-line
From the Census Bureau Web site (www.census.gov), you can find Local Employment Dynamics in the A-Z list, under L. You can even bypass the home page and go directly to QWI, using the A-Z listing, under Q. Navigation is by means of a map of the United States. The states for which data are available appear in a darker shade of blue. The Quarterly Workforce Indicators are derived from the LED and offer
• Detailed demographics
• Detailed geography
• Industries by SIC and NAICS (The default is for NAICS; if you prefer to see SIC-based information, select the SIC option from the map page)
• Historic
• Comparable
• Timely
The Census Bureau produces 29 indicators and publishes eight of them on the http://lehd.dsd.census.gov web site. The additional 21 indicators are provided directly to the states; they may release them upon request. The same 29 indicators are produced for all states in the partnership but they cover differing historic periods, based on what each state provides. Each of the 22 states represented in the QWI Online currently has data for 2001 and 2002 and most have 2003 data. Each quarter the data are refreshed, about nine months after the end of the quarter.

In this example, the information shown are for the metro Portland, ME area. The period is the 2nd quarter of 2003. Females ages 25-34 have been selected. What is illustrated is the eight indicators, comparing the quarter requested to the 4 quarter average and also the area selected with the larger area, in this case, the state of Maine.

The average monthly earnings for a female 25-34 years old who has been newly hired in the 2nd quarter of 2003 was $1,814 in the metro are, some $264 higher than was found in the same period for the state of Maine.

Slide 13 - QWI "Pivot" or Comparison Tables
With a simple click, comparison reports (tables) can be viewed. These allow for comparisons by time, geography, sex, age and other variables.

The eight indicators are shown here and include total employment measures of change such as job flow, new hires, separations, and average earnings.

The green single bar icon allows you to chart the data for the period specified as shown in the inset on the right; the colorful icon next to it allows you to chart the data for each of the four quarters of the year selected.

Illustrated here is the labor market for the Portland, ME metro area for the 1st quarter of 2003. The item that has been selected as the "pivot" or item to compare is AgeGroup. So where you saw only females age 25-34, now you can see how that age group compares to the others. Note that this is no longer specific to females, however. You'd have to select the item, Sex, as the pivot to compare characteristics of males and females in the labor market.

The second selection box contains the eight workforce indicators. You can select one or more indicators or all eight, as is highlighted here. You can download this information to create custom tables and charts.

Slide 14 – Top Industries Tool
Designed with Workforce Investment Boards in mind, this new tool provides information on the top-performing industries based on a variety of pertinent measures, by local geography, age and sex.

Eight measures are available to use for ranking the top 10, 15, or 50 industries. The screen allows you to input the number of industries you want to see (if the report yields fewer than you requested, it probably means that your area has only a limited number of industries). Definitions and formulas are given for each of the eight ranking factors, by clicking on the blue "I" for information icon. States are listed in alphabetical order and only include those currently providing data to the partnership. This number will grow.

There are 8 different age breakouts, in addition to the aggregate – ages 14-99. Finally, you can select female, male or both.

Here we've selected Average Monthly Earnings for all workers, for Prince George's County, Maryland and filtered our top industries search to only females age 25-34.

Slide 15 - Top Industries for Females, 25-34, PG Co., MD, by Average Monthly Earnings
After making your selections, the resultant report provides the top industries ranked by average monthly earnings. The number 518 before Internet Service Providers is the 3-digit North American Industrial Classification System (NAICS) code.

While 518 Internet Service Provides has the highest average monthly earnings at $5,280, the average quarterly employment of women age 25-34 in PG County is only 189, one of the lowest number of employees in the top 10 industries. On the other hand, 541 Professional, Scientific and Technical Services has far more employment, at over 2,300 per average quarter.

This table also shows the average monthly earnings for all industries -- $2,556 – and the average quarterly employment of females 25-34 years old for PG County – 21,655. This information allows you to understand how a particular industry contributes to the entire employment pie. 541 Professional, Scientific and Technical Services makes up more than 10% of the jobs in PG County for women of this age group.

Finally, the table shows how many quarters of data have been used in calculating the averages.

Slide 16 – Local Workforce Tool
This new tool was developed to aid businesses by providing timely and pertinent data about the local workforce, by geography, by age, and by sex.

It operates much like the Top Industries tool, allowing you to select one of 6 workforce characteristics and the specific geography. However, here you are prompted to select the 3-digit NAICS industry that best matches your own business. If no data are available for that 3-digit industry in your specific geography, the code will be followed by "Not Available." You can either stay with the 2-digit industry sector or broaden your geography to the state level.

Note that you may view the results as either a table or as a graph or both.

Slide 17 - Turnover Rate for Internet Publishing and Broadcasting, Arlington Co., VA
We wanted to know what the turnover rate was in Arlington County, Virginia, for the internet publishing and broadcasting industry. The resultant chart shows that the turnover rate is highest among females age 22-24 and lowest among males 55-64 years old.

The last two bars show the aggregate for females and males in the specified geography. Overall, males have a higher turnover rate, at about double that of females.

Slide 18 - Turnover Rate for Internet Publishing and Broadcasting, Arlington Co., VA, con't
This table adds more information to what we've just seen in the chart. Where we were lacking bars in the chart, we find that the data have been suppressed to ensure confidentiality and overall accuracy. In addition to the actual rate of turnover, we can see from this portion of the report that the period covered is the 2nd quarter of 2003.

Slide 19 – Mapping Tool: Where…
On the Map is a tool in development. What you can access from the LED web site is limited but illustrative of how this tool is intended to work. The tool is designed to answer the WHERE questions – where are industries located? Where are high wage jobs? Where is the hiring happening? And Where are the workers?

More than simply WHERE, the Mapping tool will show what industries are located in high wage employment areas and where the workers who work in that area live.

You begin to see the patterns between where workers live, where they work, and so what route they travel to go from one to the other.
This tool is based on geography and features panning and zooming, like many of the online driving instruction applications do.

The dynamic travel shed mapping allows the user to move the cursor over a specific geography, accessed by drilling down through a series of maps, and instantly see the pattern of commuting or the location of the major employment centers.

Labor Shed = the home locations of workers employed in an identified geographic area. Commute Shed = the employment destinations of workers living in an identified residential area.

Like other Geographic Information Systems, the LED Mapping tool is being designed to allow the user to add layers that show other features, like the location of colleges or day care centers, highways, or One-Stop career centers.

Slide 20 – Mapping Tool: Commute Shed
In this example, the geography selected is Ramsey/Hennepin counties in Minnesota. What's shown is the commute shed, that is, the employment destinations of workers living in an identified residential area. Commute shed maps show where workers are employed that live in the selected county. The shading gets darker red as worker density increases

If you look very near the center of the map, you will see a hand and push-pin icon. This is what you drag across the screen to see the dynamically generated commute shed mapping.

Slide 21 – Mapping Tool: Labor Shed
Labor shed maps show where workers live that are employed in the selected county. The shading gets darker red as worker density increases. If you flip back to the commute shed, you'll notice many nodules along the major highways to the west and north of Minneapolis/St Paul. That's where the jobs are located, where workers are going. The mass shown here represents where the workers are.

Working with these maps, users can define home and work locations based on standard area boundaries (cities, counties, WIB areas) or user-defined areas identified using simple drawing tools.

Slide 22 – Mapping Tool: Reporting
This simple report answers the question: for the county of Hennepin, where does the workforce come from?

It says that of the 729,432 commuters in the 2nd Quarter of 2001, just over half live in Hennepin county (54%). The remainder come from Ramsey, Dakota, Anoka and Washington counties or other Minnesota cities.

In addition, the average annual wages for workers are shown, again by county, as is the number who fall into earnings ranges.

Slide 23 – 12 Partner States in Mapping Plot
The prototype for On the Map featured Minnesota. Now in an expansion phase, 12 states are participating in the mapping pilot.

Slide 24 – Mapping Pilot Timeline
On the Map will have new features by the end of December 2004 and will be the topic of presentations at the LED State Partners Workshop in late January 2005. The Mapping tool will also be showcased at the National Association of Workforce Board Forum 2005

in early March. As the tool is completed for each state in the pilot program, it will be rolled out and training provided to the state participants.

Slide 25 – Products and Information
How to keep up to date on changes to the tools of this rapid-paced program?

The LED website features a WHAT'S NEW section with short announcements about developments, new partners, and data releases.

On the Contact Us page, you can join the LEHD-General list serv to learn about LED and its parent program, Longitudinal Household-Employer Dynamics.

In the Library section of the LED web site, you will find the semi-annual newsletter.

For information about conferences and workshops on LED, see the Workshops & Training tab on the LED web site.

Currently, a series of reports on Older Workers is being developed. These are updated online as they become available and are available in .PDF format under the Library tab, under Profiles. In the future, new information on transportation, welfare and low wage work, immigration, even health care may be produced from the over-arching LEHD program.

Slide 26 – Positive Response from Our Users
The response to the LED partnership and its data tools has been very positive. Users, WIBs, LMIs, focus group participants all agree: "Once you see the site, you are hooked." To paraphrase a WIB user "anything that makes data easier to synthesize for strategic planning is of great assistance to us."

Slide 27 – LED Contact Information
We hope you find this redesigned and enhanced LED web site useful and easy to use. We welcome your comments and feedback, which can be sent to any of the email addresses above.